

TECHNIQUES FOR PERMITTING ACCESS ACROSS A
CONTEXT BARRIER ON A SMALL FOOTPRINT DEVICE
USING AN ENTRY POINT OBJECT

Abstract of the Disclosure

A small footprint device can securely run multiple programs from unrelated vendors by the inclusion of a context barrier isolating the execution of the programs. The context barrier performs security checks to see that principal and object are within the same namespace or memory space and to see that a requested action is appropriate for an object to be operated upon. Each program or set of programs runs in a separate context. Access from one program to another program across the context barrier can be achieved under controlled circumstances by using an entry point object. The entry point object can either perform accesses across the context barrier on behalf of a requesting program or can pass the request to the program to be accessed and switch contexts to the program to be accessed.